# ExportIT Tanzania

# OVERVIEW OF TANZANIA'S INTERNET AND E-COMMERCE MARKETS February 2002

This market brief was prepared by Megan Russell, under the direction of Raymond Cho, Office of Information Technologies (<a href="http://exportIT.ita.doc.gov">http://exportIT.ita.doc.gov</a>), International Trade Administration, U.S. Department of Commerce, Washington, D.C. This brief describes and analyzes trends and key issues in Internet and e-commerce adoption in Tanzania in order to create a framework from which U.S. small- and medium-sized IT enterprises (SMEs) can understand the Tanzanian market.

#### INTRODUCTION

Tanzania, a nation of 33 million inhabitants, has historically relied upon the processing of agricultural products and the production of light consumer goods for economic survival. However, Tanzania's economy is expanding rapidly after many years of slow growth. Despite past political instability, the Tanzanian government has worked to improve its foreign investment climate by redrawing tax codes, floating the exchange rate, licensing foreign banks, and creating a new investment promotion center. Recently eased foreign currency regulations, a more lenient licensing policy and newly established free trade zones in Dar-es-Salaam, Kigoma, Mtwara, and Tanga have created a more import-friendly atmosphere. Key areas of development remain agriculture, mining and tourism. However, efforts to bolster and improve the technological climate in Tanzania are garnering a newfound importance.

Developing nations like Tanzania are substantially improving their IT infrastructure to close the gap between themselves and leading technological nations. Despite such obstacles as lack of credit, lack of demand, and lack of infrastructure among others, Tanzania has shown consistent growth in both the

IT and communications markets. Consistent with the current trends sweeping Africa of upgrading Internet connections and encouraging IT usage, the Tanzanian government has also embarked on a mission to cultivate a more technologically advanced climate. In July 1996, Tanzania had no Internet access. By May 2000, Tanzania had jumped to 13<sup>th</sup> place among all African nations in its Internet connectivity ranking, with a total of 14 ISPs and over 3,000 Internet accounts.<sup>1</sup>

Mobile communications has gained significance as a means of overcoming Tanzania's traditional infrastructural challenges. Despite internal growth in the Internet and telecommunications, these sectors remain largely untapped and open for foreign investment. Huge disparities still exist between South Africa, Africa's most technologically adept nation, and the remainder of the continent, leaving enormous opportunity for investment and improvement.

#### MARKET OVERVIEW

Tanzania's economy is dominated by small- to medium-sized businesses

<sup>&</sup>lt;sup>1</sup> Economic Intelligence Unit, 2001. *Africa and the Internet: An Unrealized Opportunity*. 06 May 2001.

(SMEs). Several factors within this SME environment directly affect Tanzania's telecommunications and Internet industries, specifically the development of a successful e-business sector. Recent reports confirm that lack of credit is the most critical obstacle to doing business in Tanzania, followed by high utility prices, infrastructural difficulties, a lack of support services, import competition, and low demand.<sup>2</sup>

Table 1: Comparison Rank of Obstacles to Business Expansion in Tanzania and Kenya

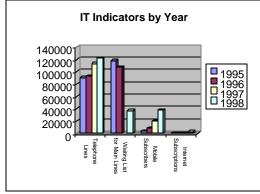
OBSTACLE	Tanzania	Kenya
Lack of Credit	1	1
Lack of Demand	6	2
Lack of Infrastructure	3	3
High Utility Prices	2	6
Lack of Support Services	4	4
Import Competition	5	5

Source: Matambayla and Wolf. "Performance of SMEs in East Africa: Case Studies from Kenya and Tanzania."

Even so, the spread of information and communication technologies in Tanzania has been relatively rapid considering the existence of such obstacles. In 1995, Tanzania had no Internet service providers or Internet host sites. As early as 1998, Tanzania had developed 7 ISPs and 129 host sites, as well as having 3,000 Internet subscribers.<sup>3</sup>

Studies have shown that increased investment in information and communications technologies seems to lead to a more productive, efficient and developed economy. The relationship between increased investment in information and communications technologies and Tanzania's overall

productivity, product-quality and skill levels appears to be a positive one.<sup>4</sup>



Source: United Nations Development Programme, 1999.

As the president of McConnell International, which released its second annual study of Internet and e-commerce readiness in developing countries in 2001, asserted: "Improving Internet and e-commerce technology in developing countries is the way forward for long-term growth and recovery...by bringing emerging markets to the net, everyone benefits." 5

## INTERNET TECHNOLOGIES

Internet connectivity in Africa and Tanzania has expanded rapidly since the mid-1990s. Following a governmental request for bids for international data carriers in 1996, three internationally-owned carriers were granted licenses to operate in Tanzania: SITA, Datel and Wilken/Afsat. The University of Dar-es-Salaam was granted a license for an internal service without resale capabilities. Until Wilken/Afsat appeared on the market, carrier services were highly anti-competitive, with costs of leased lines to Datel and Sita running

<sup>&</sup>lt;sup>2</sup> Matambalya, Francis A.S.T. and Susanna Wolf. Performance of SMEs in East Africa: Case Studies for Tanzania and Kenya. 5-7 April 2001. <sup>3</sup> United Nations Development Programme. Eastern Africa Sub-Regional Resource Facility: Tanzania. www.undp.org

<sup>&</sup>lt;sup>4</sup> Matambalya, Francis A.S.T. and Susanna Wolf. Performance of SMEs in East Africa: Case Studies for Tanzania and Kenya. 5-7 April 2001.

<sup>&</sup>lt;sup>5</sup> Traffic World: Prospects for e-business in developing countries. 15 May 2001.

approximately US\$17,000 a month for 128 Kbps. Wilken/Afsat's entrance into the market at US\$5,000 for 64 Kbps stratified the resale environment and lowered costs.<sup>6</sup>

The most current information cites the existence of seven ISPs in Tanzania: CyberTwiga, Internet Africa, Cats-Net, Raha, Zanzinet, Next-Step Services and AfricaOnline Tanzania. CyberTwiga was Tanzania's first Internet Service Provider, establishing international connectivity via 64 Kbps, charging US\$50/month for e-mail only accounts and US\$75/month for unlimited web access/email accounts. Internet Africa. formed in 1996, connects its servers to an Internet gateway in Norway through a VSAT connection at 128 Kbps. New user connection fees run US\$100 for the first user and US\$25 for each additional user. The connection also requires a local line fee payable to the Tanzania Communications Commission for usage of local telephone lines. Cats-Net, founded in 1997, charges US\$100 for the initial start-up connection and US\$52 per month. Web hosting services run approximately US\$30 per month and website production services run US\$100 per page. Raha provides a 256K VSAT link and its customer base has grown to over 1,500 users.

Zanzinet remains the only full Internet Service Provider in Zanzibar. Windows NT and Linux servers allow dial-up PPP/POP customers full access to the Internet. Next-Step Services operates an email station in Zanzibar, convenient to government and business offices, as well as tourist attractions. They provide full email/Internet browsing services, as well as faxing, international telephone and secretarial services. AfricaOnline Tanzania, a subsidiary of AfricaOnline, remains the most advanced and sophisticated provider of Internet services in Tanzania, offering an array of services and technological expertise. AfricaOnline charges US\$13 per month for limited Internet access, US\$35 per month for semi-limited access and US\$69 per month for unlimited Internet access and email usage. Each account is also charged an US\$18 connection fee that includes an Internet browser and email client software and installation, an hour of onsite training and 24-hour telephone support.8

The most recent data cites 536 Internet host sites and 3.000 Internet users in Tanzania during the year 2000. Per 10,000 inhabitants, 0.94 are connected to the Internet at 1098 Kbps. 9 Although statistical analyses suggest that Tanzania can increase its number of Internet sites seven times over by lowering access costs to the levels found in South Africa, this result depends upon the accessibility of those sites to a paying public. Until Internet access sites increase in community centers, libraries, schools and universities, access is restricted to a small minority of Tanzanians, who can afford it. 10 In general, liberalization of the telecommunications market and the growth of ISP competition will lower Tanzania's access costs. Thus, the penetration of the Internet depends upon

<sup>&</sup>lt;sup>6</sup> <u>http://www.bellanet.org/partners/aisi/nici/tanzania/tanzinter.htm</u>

<sup>&</sup>lt;sup>7</sup> http://www.bellanet.org/partners/aisi/nici/tanzania/tanzinter.htm

<sup>&</sup>lt;sup>8</sup> http://www.africaonline.co.tz/covercosts.htm

<sup>9</sup> http://www.bellanet.org/partners/aisi/nici/tanzan
ia/tanzinter.htm

<sup>10</sup> The World Bank. Economic Tool-kit and Workshops for Internet Connectivity in Africa. www.infodev.org/projects/finafcon./htm

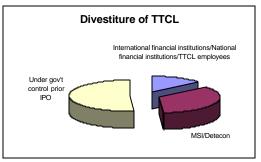
an efficient, privatized, telecommunications infrastructure.

## TELECOMMUNICATIONS DEVELOPMENT

Historically, Tanzania has suffered from poor telecommunications infrastructure, especially in the rural areas outside its capital, Dar-es-Salaam. The East African Community managed telecommunications services in Tanzania until 1977, followed by the Tanzania Post and Telecommunications Corporation from 1978-1993. In 1994, the Tanzania Telecommunications Company Limited (TTCL), which at that time was entirely government-owned, inherited the oversight of telecommunications services. The Tanzania Communications Commission is an independent regulatory authority that handles licensing and remains the sole provider for basic fixed services on the mainland. A privately owned company called Zantel operates in Zanzibar.

Since 1993, the Tanzanian government has focused on the liberalization of its telecommunications industry through the implementation of the Telecommunications Restructuring Programme (TRP). However, the National Telecommunications Policy (NTP) of October 1997 clarified the government's objectives for its telecommunications sector, including accelerated development of an efficient telecommunications network that can provide a national infrastructure and access to current technologies by all sectors of the economy and all segments of the population. 11

In May 2001, the Tanzanian government sold approximately 35 percent of an enlarged share capital of TTCL to MSI of the Netherlands and Detecon of Germany. To further the privatization process, TCC granted five new licenses to TTCL for basic fixed line services, mobile communications, paging and data services. The government plans to sell 14 percent of the total shares in TTCL to international finance institutions, national financial institutions and TTCL employees. The rest of the shares will remain under government control until an IPO is performed. 12



Source: Ministry of Communications Fact Sheet

The teledensity target of the NTP is 6 telephones per 100 persons by 2020. In 1999, Tanzania's teledensity remained around 0.5 per 100 persons. Nevertheless, dramatic infrastructural improvements within Dar-es-Salaam have included the installation of digital exchanges, the availability of two cellular phone networks and a rapid increase in cellular service providers. Mobitel began operation of its ETACS cellular network in 1994 and currently maintains 14,600 subscribers. It transitioned to a GSM network in September 2000. Tritel operates a US\$12.5 million GSM cellular network and holds 5.000 subscribers with a

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<sup>&</sup>lt;sup>11</sup> Tanzania Telecommunications Company Ltd. *The Divestiture of TTCL*. <u>www.psrctz.com</u>

<sup>&</sup>lt;sup>12</sup> Ministry of Communications, South Africa. Tanzania Fact Sheet. <a href="http://docweb.pwv.gov.za/africon/docs/factsheets/tanzania.html">http://docweb.pwv.gov.za/africon/docs/factsheets/tanzania.html</a>

growth rate of 500 new subscribers a month. TTCL operates a GSM system throughout Tanzania, but operates a joint system with Mobitel in the coastal zone where it does not own a cellular license. <sup>13</sup>

Several projects within the larger liberalization scheme are still seeking investors. The Southern Corridor Telecomms Project aims to expand service and modernize transmission in Mtwara and Lindi, while the Rural Project aims to replace magneto telephone lines with automatic lines. The Kagera Project will install digital telephone exchanges in Kagera and has been promised funding from the Canadian government. The WordTel Project to install 300,000 telephone lines is being funded by WordTel.

### **REGULATORY ISSUES**

The regulatory responsibilities of the telecommunications sector have belonged to the Tanzania Communications Commission (TCC) since its creation in 1995. TCC is responsible for the regulation, authorization and supervision of all telecommunications services. The Ministry of Communication and Transport, to which the TCC reports, appoints the members of the TCC's board of directors, resulting in the creation of a government-controlled regulatory sector. The TCC designates permissible frequencies for radio and television broadcasting and has issued four paging licenses, but is still awaiting the establishment of services under these licenses. Recently lowered international

<sup>13</sup> Ministry of Communications, South Africa. Tanzania Fact Sheet. <a href="http://docweb.pwv.gov.za/africon/docs/factsheets/tanzania.html">http://docweb.pwv.gov.za/africon/docs/factsheets/tanzania.html</a> call charges have resulted in the heightening cost of calls within the local area, which includes Kenya and Uganda, and consequentially higher Internet access rates. Local calls now cost US\$1.94 during peak hours and US\$1.45 during non-peak hours.

As a part of the general liberalization of the telecommunications sector, the TCC has granted licenses to operate links. private networks or value-added services and devices, to install equipment and networks at subscribers premises and promoted the general development of competition within the sector. 14 Looking toward the future and the gradual implementation of broadband services, the TCC will have to continue its avid competition development initiatives because broadband networks tend toward monopoly due to high barriers to entry and ability to deliver multiple services through the same point of entry. In its early implementation stages, broadband is costly and difficult to provide, especially in low-density areas like rural Tanzania. Such costly ventures inevitably thwart regional development programs and pose additional regulatory concerns. As a result, the Tanzanian government may find it more reasonable to, as the World Bank suggests, concentrate on low cost, reliable local bandwidth connectivity until reliable countrywide access is achieved.

#### **E-BUSINESS**

E-business opportunities in Africa are promising, even though structural constraints and skill shortages have historically hindered their development.

<sup>&</sup>lt;sup>14</sup> Ministry of Communications, South Africa. Tanzania Fact Sheet. <a href="http://docweb.pwv.gov.za/africon/docs/factsheets/tanzania.html">http://docweb.pwv.gov.za/africon/docs/factsheets/tanzania.html</a>

Although Africa does not have the number of IT professionals found in countries like India, a small but talented group of upstart African firms have outsourcing capabilities for international IT firms. Based upon available data on Internet users, the state of telecommunications infrastructure and its ranking in the World Economic Forum's Africa Competitiveness Report, Tanzania is likely to be a key player in the development of Africa's e-business sector, including software and Internet development, data entry, call centers and bookkeeping services. Further expansion of the Internet in Tanzania should jump start the country's economy, as the proliferation of electronic data transfer over the Internet closes the information gap and bridges international buyers and sellers over the next five years. 15 Whereas East Africa is a region typically marginalized in terms of economic development and international trade, the Internet and a growing e-business sector promises to bring Tanzania closer to the global market place.

## **INVESTMENT ISSUES**

Foreign investment is permitted in virtually every sector in Tanzania. In 1997, the Tanzanian government updated its investment code and created the Tanzanian Investment Center (TIC). The TIC cannot deny investment, but can determine whether or not an investment qualifies for incentives. All foreign investors willing to invest over US\$300,000 are eligible for incentives. Investors in leading sectors, which include infrastructure, can import capital duty-free. Priority sectors, which include broadcasting, construction, manufacturing, and rehabilitation and

15 Ibid.

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expansion, may also include special development sectors as designated. Both priority and leading sector investors are eligible for a suspension of VAT charges until the start of operations, a five-year tax-free period and a 100 percent capital allowance deduction during profitearning years. A low, uniform 5 percent taxation rate on capital equipment also promises to improve Tanzania's investment prospects. Tanzania has not acknowledged any specific obligations to GATS with regard to information technologies. <sup>16</sup>

The United States has historically played a small investment role in Tanzania, but recently U.S. firms representing the manufacturing, communications, hospitality and tobacco industries have been taking advantage of the investment incentives promised by the Tanzanian government. Within the IT industry, Tanzania has paid special attention to attracting foreign investment in the cellular communications sub-sector. U.S.-owned ACG Telecom has already invested in Tanzania and Millicom Int, a joint venture between the U.S. and several European countries, and it has met tremendous success within the Tanzanian market. 17

#### POLICY PROJECTIONS

The success of the Internet in Tanzania depends almost entirely on an efficient and privatized telecommunications sector. To expand access to the Internet in Tanzania, the World Bank suggests the provision of the following: low cost

Office of the United States Trade
 Representative. Tanzania: Foreign Trade
 Barriers. www.ustr.gov/reports/nte/2000/tanzania.pdf
 U.S. Department of Commerce. Country

<sup>&</sup>lt;sup>17</sup> U.S. Department of Commerce. Country Commercial Guide: Tanzania. www.usatrade.gov

and reliable access to local and international bandwidth, countrywide reliable local access to ISPs, low cost access to network equipment, widespread public access to networked computers, and an educated user community and support for the development of national and pan-African Internet content. Specific policies that may lead to these provisions include: the continued liberalization of the telecommunications network and Internet service provision, the lowering of tariffs on information technology and telecommunications equipment, general tariff rebalancing with additional support for local ISP access, support for community Internet access, and training support. 18

#### BUSINESS ADVICE

Tanzania provides a lucrative market for the trade of IT products and services, especially to Far Eastern markets such as China, Korea, Thailand and Malaysia. The most effective method of marketing in Tanzania is through an agent/distributor, a local representative or an existing local supplier for three reasons. First, it enables firms to maintain a sense of continuity. Secondly, it gives the local contact the responsibility of collecting payment and, thus, reduces risk. Finally, it provides a sense of security for American buyers unfamiliar with Tanzanian business practices. Direct marketing should be conducted with caution, especially with respect to payment, as Tanzania's history with payment agreements is not impressive. Any direct interaction should include payment protections in order to avoid possible nonpayment later.

Where possible, the U.S. Embassy<sup>19</sup> can assist an investor in locating possible agents/distributors for a local partnership. U.S. firms wishing to establish an office on location in Tanzania may establish either a joint venture company or a U.S.-owned subsidiary. A joint venture in Tanzania promises to benefit from the business knowledge of a local partner familiar with Tanzania's business customs and governmental regulations. Joint ventures and wholly owned foreign firms operating in Tanzania are subject to a 35 percent tax. International firms with subsidiaries in Tanzania will also be responsible for a 5 percent withholding tax. A downside to a joint venture operation is the difference between Tanzanian and U.S. business practices that sometimes results in miscommunication and unethical business practices by the local partner. A local attorney is advised for both joint ventures and subsidiaries and an expatriate manager is suggested to help oversee operations.

An important step in establishing local contacts in Tanzania and its surrounding region is participation in the annual Afro Business Trade Fair in Kampula, Uganda, sponsored by the Uganda National Chamber of Commerce and the **COMESA Business Community** Committee. Contacts can also be made through personalized business proposals posted on the African Classified Advertisements website and in the

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<sup>&</sup>lt;sup>18</sup> The World Bank. *Economic Tool-kit and* Workshops for Internet Connectivity in Africa.

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